West Virginia American Water Company
Kanawha Valley
PWSID: WV3302016

Source Water Assessment Completed – **April 2002**

WVAWC-Kanawha Valley Source – Elk River; **Susceptibility Ranking - High**.

Watershed Delineation – Elk River Watershed covers approximately 1,527 square miles.
Zone of Critical Concern (ZCC) – based on a 5 hour time of travel model; approximately 5,969 acres. This area warrants a more detailed inventory and management.

Water Quality Data

WVAWC reported high values of turbidity and bacteria in their raw water.
WVDEP reported 26% of the watershed fully supporting designated uses. The principal causes of impairment are metals, siltation, and habitat alteration. **The principal sources of contamination in the watershed are unknown sources, petroleum activities, and abandoned mining.**

Potential Significant Contaminant Sources (PSCS)

A detailed risk assessment of PSCS's was beyond the scope of the source water assessment. A summary of PSCS in the Zone of Critical Concern included a Shell Gas Station, Sun Belt Industries, Municipal operations (Sewage Lift Station, road salt storage), and Industrial Operations (Allegheny Power Company and Pennzoil Manufacturing Plant (**Freedom Industries**)). The assessment noted that some of the industrial sites may have large volumes of potential contaminant stored.

SWAPP Area Assessment and Protection Activities

The assessment indicates that the water supply is susceptible to flooding and accidental release/spill of material due to the 495 stream crossings in the watershed. **The assessment states that protections efforts should be directed toward the establishment of an effective and efficient emergency response plan if one does not exist.** It also states that current landuse activities impact the ecological health including coal, oil, gas, timbering, quarries, and agriculture.

SWAP Recommendations

The assessment recommends collection of additional information on point and non-point sources, work with state and local officials on regulations and inspections, restrict access to intake area, and consider protection options to manage PSOC.

Next Steps

The assessment identifies development of a protection plan which would include Contingency Planning, identifying possible Alternative Sources, and Management Planning.

Surface Systems – Emergency/Contingency and Land Management Plan Questionnaire – August 10, 2006

In 2006, the WVHHR sent out a questionnaire to surface water systems to determine the status of protection activities. WVAWC-Kanawha Valley replied that they were in the process of doing Risk Management Plans, Emergency Response Plans, Stream monitoring beyond regulatory requirements, and participating on a local source water committee (Little Sandy Creek Watershed). They also stated that they were planning to do more on public education and reviewing the watershed for potential Sources of contamination.

Recommendation

Every public water system should have a contingency plan. Reserve capacity and alternative sources should be identified. However, in this case, I don't think it would have mattered. The source of the contamination was too close to the intake (1.5 miles). There was insufficient time to respond. Local land use regulations would be the only way to remove this kind of threat in the future.